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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/046,731

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Shiquan Tao

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2499

7590

03/11/2005

Supervisor, Patent Prosecution Services  
PIPER MARBURY RUDNICK & WOLFE LLP  
1200 Nineteenth Street, N.W.  
Washington, DC 20036-2412

EXAMINER

MOONEY, MICHAEL P

ART UNIT

PAPER NUMBER

2883

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/046,731

Applicant(s)

TAO ET AL.

Examiner

Michael P. Mooney

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 and 20-25 is/are allowed.
- 6) ☒ Claim(s) 16-19, 26-44 and 46-49 is/are rejected.
- 7) ☒ Claim(s) 45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 16-19, 26-44, 46-49 rejected under 35 U.S.C. 103(a) as being unpatentable over Sigel, Jr. et al. (5250095).**

Claims 16-17, and any other product claim that has not been allowed in the ***Allowable Subject Matter*** section below, are rejected as a "product-by-process" claims. This type of claim is discussed in the MPEP as follows:

### **2113 Product-by-Process Claims**

#### **PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO THE MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE IMPLIED BY THE STEPS**

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-

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process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted) (Claim was directed to a novolac color developer. The process of making the developer was allowed. The difference between the inventive process and the prior art was the addition of metal oxide and carboxylic acid as separate ingredients instead of adding the more expensive pre-reacted metal carboxylate. The product-by-process claim was rejected because the end product, in both the prior art and the allowed process, ends up containing metal carboxylate. The fact that the metal carboxylate is not directly added, but is instead produced in-situ does not change the end product).

Sigel, Jr. et al. teaches the structure implied by the steps of making a porous fiber by hydrolyzing a silicate ester with water using a catalyst to form a hydrolyzed solution; transferring the hydrolyzed solution into the cavity of a mold; allowing the hydrolyzed solution to gelatinize to form a sol-gel fiber; removing the sol-gel fiber from the mold); and drying the sol-gel fiber because Sigel, Jr. et al. teaches a porous fiber. (Abstract; fig. 1).

Thus claim 16 is rejected.

It is noted that whether the claimed porous fiber is made via a sol-gel process is not germane to the patentability of the product of a porous fiber. There is nothing in the claim or specification to indicate that an equivalent to the claimed product cannot be made by methods other than sol-gel and/or the method used by Sigel, Jr. et al. (See: product-by-process statements above).

Sigel, Jr. et al. teaches incorporating a sensing material into the sol-gel fiber. (Abstract; col. 8 lines 48-51). Thus, by applying product-by-process as delineated above, Sigel, Jr. et al. teaches the product of claim 17. Thus claim 17 is rejected.

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Sigel, Jr. et al. does not explicitly state the term "clad". Air (or other surrounding gases or liquids), however, acts as a cladding. (Abstract). Thus, by applying product-by-process as delineated above, Sigel, Jr. et al. teaches the product of claim 18. Thus claim 18 is rejected.

Sigel, Jr. et al. teaches wherein the sensing material is  $\text{CoCl.sub.2}$  or  $\text{CuCl.sub.2}$ . Thus claim 19 is rejected.

Regarding claims 26, 29-30, the said claims are rendered obvious via the reasoning and/or references stated above. Thus claims 26, 29-30 are rejected.

Regarding claims 27-28, the said claims are rendered obvious via the reasoning and/or references stated above and the fact that the lens(es) are rendered obvious via notoriously well known principles in the art. Thus claims 27-28 are rejected.

Regarding claim 31, the said claim is rendered obvious via the reasoning and/or references stated above and the fact that it is notoriously well known to use a computer in the data acquisition system. Thus claim 31 is rejected.

Regarding claims 32-44, 46-49 the said claims are rendered obvious via the reasoning and/or references stated above and/or notoriously well known art principles. Thus claims 32-44, 46-49 are rejected.

***Allowable Subject Matter***

Claims 1-15, 20-25 are allowed.

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Claim 45 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

It is noted that the claims are allowable because the unique combination of each and every specific element stated in the claims is not taught or rendered obvious by the prior art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

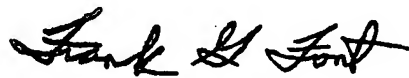
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-

1562.



Michael P. Mooney  
Examiner  
Art Unit 2883



Frank G. Font  
Supervisory Patent Examiner  
Art Unit 2883

FGF/mpm  
3/7/05